

CALIFORNIA STATE BOARD OF HEALTH

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THE CALIFORNIA STATE BOARD OF HEALTH.

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REGULAR MEETINGS.

The meetings of the California State Board of Health are held regularly the first Saturday of each month, but the quarterly meetings required by law to be held at the Capitol of the State are ordinarily designated as January, April, July, and October.

By courtesy of the University of California the Food and Drug Laboratory and the Hygienic Laboratory are located in University buildings at Berkeley, California.

Address all communications to the

SECRETARY, Sacramento, California.

COMMENTS ON MATTERS OF INTEREST TO THE PUBLIC HEALTH OF CALIFORNIA.

The new Secretary, in reviewing the many forms of excellent work performed by his predecessor, finds among other things, that it was Dr. Snow's custom to present under the head of "Comments," an article in each of the monthly Bulletins of the Board. Such articles, as the readers of this publication will remember, covered a wide latitude of subjects. The present Secretary believes that this custom is a good one and worthy of emulation, presenting as it does, in a brief form, a statement of the more important sanitary conditions of California, and allowing this office from time to time to communicate directly, in the most convenient way, with the several health officers throughout the State. If there is one most important factor in making the Health Department of this State a smoothly working and efficient machine, it is that this office and the several county and city health officers must work in harmony and to a single end. These monthly comments are eminently suited for this purpose, showing to each health officer alike the intents, opinions and desires of this office, as well as conditions that for the moment at least, are the more important.

It appeared to the writer that in assuming the great responsibility incident to this position, one of the first things to do was to make a summary of the diseases that are the most dangerous to California, and therefore, those which have to be watched the most carefully. I have, with this idea in view, passed in review the more dangerous communicable diseases, not only those that exist within the State, but those that exist in nearby countries, or at least in countries with which we have constant commercial intercourse, and it is the intention, in so far as space will permit, to consider each of these in a brief way, both from the standpoint of our apparent danger from them, as well as our best defense against them.

The list which I present below is not given in the order of their importance. In fact, their relative importance is a difficult matter to determine, but I have started out by considering five of the six diseases which the Federal Government protects us from through its quarantine stations and medical inspectors in foreign ports, and proceeded from this group to those diseases that although preventable are like the proverbial poor, "always with us."

PLAGUE.

A reference to the Public Health reports will show that from without we have Ecuador reporting cases of this disease, and from past history of that section and our knowledge of plague, it is safe to regard the whole west coast of South America as infected, and to also regard with considerable suspicion the west coast of Mexico, especially in the neighborhood of Mazatlan, which some ten years ago suffered from a severe outbreak. For reasons of safety we must consider that once plague is reported from a locality, unless it can be shown that considerable laboratory examination is being continually carried on with regular results,

that locality must remain indefinitely under suspicion. In addition to these, the following foreign countries having traffic with America: the Philippines, Australia, Hawaii, Java, certain Chinese and Japanese ports, are either constantly reported as being infected, or have been so reported in recent times.

The Public Health Service, through its quarantine offices in San Francisco and other California ports, is keeping close watch of this disease from foreign countries, and, therefore, this danger of future infection of California is reduced to a minimum.

When we leave the subject of plague in foreign countries, we must next consider an outbreak among rats in Seattle, Washington. We there find that measures are being taken under the supervision of the United States Public Health Service for the protection of California ports; so, danger from that source is very slight. There are dangers, however, in the Northwest cities which had constant intercourse with Seattle previous to the discovery of plague in that place. From last reports these places had not adopted systematic measures looking to the discovery of infected rats. These places must be regarded as real sources of danger, unfortunately; for until a city has examined its rats and reported some of them infected, the National Quarantine Stations are not permitted to adopt measures on vessels arriving in California from such places, and, therefore, these other parts of the Northwest must be considered as possible sources of danger to us.

In our own State we find that there has been no infection among ground squirrels reported for some time past. This fact would not ordinarily have great significance, because at this season of the year only adult squirrels are in existence. Most of these adults have been immunized by an annual spring outbreak that has been occurring for some years past, but this particular year, it is believed by Surgeon John D. Long, U. S. Public Health Service, in charge of this work, will mark the disappearance of the disease. He hopes by the first of March to destroy all squirrels in the known infected zones of Contra Costa, Alameda, and Santa Clara counties, and by the first of July to complete his work in the remaining infected counties of Stanislaus, Merced, San Joaquin, San Benito, Monterey, and Santa Cruz. This infection of ground squirrels, so far as we can believe circumstantial evidence, spread from an outbreak among rats at the Port Costa grain wharves in 1903 and swept from there to all the counties mentioned in the preceding list. While it remains it is a constant menace to the people of the infected districts, and it is to be hoped that its eradication will occur at an early date.

SMALLPOX.

The dangers of this disease from foreign countries and adjoining states is relatively prevalent compared to the dangers of the spread from foci that exist within the State. While no extensive outbreaks have occurred recently, the disease is widespread in this State, and that fact, together with apparently growing anti-vaccination sentiment in some sections, makes this disease one of the more serious dangers to the State's health. Fortunately, as in other parts of the United States, since late in the nineties, the type has been mild in character, and the mortality correspondingly low. It is not safe, however, to regard this mildness of type as a permanent feature of the disease. Vaccination is

the only dependable measure against this danger, is simple to perform, and compared to the dangers of the mildest type of this disease, is harmless.

Anti-vaccination sentiment, for the most part, is based upon three fundamental mistakes:

1. Ignorance of or inability to weigh the evidence presented by history; that in the pre-vaccination period of our own race or the more recent history of uncivilized people—before vaccination was performed, practically all people born had smallpox and of these one in four died. While on the other hand, since this great discovery was made, well-vaccinated communities never experience a serious outbreak of the disease.

2. The belief that climate, mode of living or general sanitation can prevent the spread of this disease among the unvaccinated; there is no reason to believe that our better mode of life has any influence on the communicability of this disease.

3. That vaccination is dangerous: to this we may say that there is no potent drug used in medicine, no surgical procedure, that has not caused death, and so, if we search the literature of vaccination, we find death from it also; but, what is this mortality compared to the mortality of smallpox? It is difficult to answer this question, but it is certain that it is not more than as 1 is to 10,000, and yet, in spite of this, we find persons comparing the dangers of one to the dangers of the other!

To illustrate the peculiar fear that some have of this measure in comparison with other more serious procedures, the writer doubts that those who dread vaccination would have the least hesitation in allowing any one of the other three below mentioned measures performed, if their condition demanded it: the removal of tonsils, the administration of a hypodermic injection, or the placing of a hot water bottle at the feet; yet, the writer has observed one death from each of the above procedures—the first from infection, the second from shock, the last from scalding. During the same time that these were observed, although he has seen thousands vaccinated, he has never seen the loss of life or limb result. It is to be hoped that some day, some one will start a *pro*-vaccination society, and if such an organization employs one half the zeal in searching for proof that vaccination has done inestimable good and very little harm that the anti-vaccinationists have employed in unearthing the few fatal results in history, there would remain very few unvaccinated persons among the logical-minded members of a community.

Until some such movement is launched to offset this dangerous and foolish popular error, ours must continue to be the only civilized country of the world that does not uniformly vaccinate its children.

LEPROSY.

There has never been any great amount of this disease in California. At any given moment 30 or less cases are to be found in the isolation hospitals of the State, and most of these are imported cases, or, at least those who have acquired their infection in other countries.

Undoubtedly, some cases have acquired their infection here. Without the literature available at this moment the writer recalls two cases of undoubted California origin, reported by Montgomery of San Fran-

cisco; but while few cases *have* originated here, there is no doubt that infection can be acquired anywhere, provided a sufficient number of persons come in intimate contact with lepers. The danger of this disease here is in the influx of persons from certain other countries; notably, China, Japan, Hawaii and Mexico. The incidence of this disease is high among all the people just mentioned and each of these nations sends frequent visitors to our shores. Such persons, of course, are inspected at our National Quarantine Stations, but often it is impossible to detect cases in their early stages. Physicians throughout the State should bear these facts in mind and keep a lookout for suspicious symptoms among those people from infected areas, who come to them for treatment. By this means, many cases will be detected that might otherwise escape and infect others.

At a meeting of the Board on February 7th a resolution was passed which made leprosy a quarantinable disease under the laws of the State.

YELLOW FEVER.

Cases of this disease are frequently reported from the west coast of Mexico and from the equatorial and subtropical portions of South America's west coast. We have direct traffic from both of these areas and several vessels have entered San Francisco in the last ten or fifteen years having had cases of this disease during their voyages. Owing to the length of the voyage, from most parts of the areas mentioned and the efficient quarantine inspections of California ports upon entering, the chances of cases of this disease reaching shore are very small. To further add to our security is the fact, according to Professor Herms of the University of California, that so far as the University has authoritative information, the yellow fever mosquito, *Stegomyia colopus*, does not exist in California. This is a most favorable circumstance, but it also points out the importance of keeping this mosquito from entering in the future. It is true that most of our maritime traffic from countries having this mosquito, notably Mexico and Hawaii, enters at the port of San Francisco. The weather at that port is usually too cold to be conducive to the mosquito flying ashore from its harbor on the vessel, but there are days that are warm enough to permit of such flight and there is little reason to doubt that in the interior of the State there are many localities where this mosquito would thrive in the same way that the *Anopheles* and *Culex* do.

In adopting precautions to prevent California from becoming infested with this species, we must also remember that Louisiana and Texas, only a few days removed from us, have this mosquito in great abundance and if once introduced on a western bound Pullman car, it would be likely to become established here. We believe this subject is important enough to be taken up with the Federal authorities to make it part of their new inspection of coaches.

ASIATIC CHOLERA.

From our public health reports it will be seen at present that, with the exception of the extensive outbreak of this disease at the site of the recent Turko-Balkan war and nearby countries, no great prevalence of the disease is recorded.

The countries mentioned are too remote at present to be of importance to us, but inasmuch as cholera carriers have been demonstrated to dis-

seminate this virulent micro-organism for a period of sixty days or more, the outbreak in southeastern Europe may become of importance to us with the opening of the Panama Canal.

At present our only source of danger is from Asiatic ports, where in certain countries, at least, the disease is epidemic.

Our quarantine stations do all in their power to protect us from this danger, including the systematic examination of the discharges of immigrants from cholera ports. But in spite of such precautions, owing to the difficulty of detecting some cholera carriers, it is possible for the disease to become introduced. "The jumps" this disease can make was shown in the Hawaiian outbreak of the spring of 1911, when cholera appeared in Honolulu, the nearest known cases being in Japan, ten or twelve days away by the fastest steamers.

The country, which has, during ordinary times, made itself most secure against the spread of typhoid fever, is safest against the spread of cholera, should that disease once be introduced, and remote is our danger from this disease at the present time. The extremely deadly nature of cholera makes an additional reason why we should do everything to prevent food and water supplies from being contaminated directly or indirectly by sewage.

TYPHOID FEVER.

Practically our only danger here is from the spread of the disease from existing foci; the imported cases are too rare to be of much relative importance. At this time of the year the chief danger lies in the contamination of streams from surface washing, incident to heavy rains, as well as the infection of ground waters by the same means. Later in the year the fly becomes an important factor, especially about insanitary camps, insanitary "health resorts" and other places where the fly is allowed to visit food supplies and cesspools, alternately, at such intervals as its fancy dictates.

Physicians, as well as the general public, should closely observe and report to their local health officers all pollution of streams. They should also report all insanitary stables where flies are bred (according to entomologists, 90 per cent of the common fly *musca domestica* breeds in such places) as well as cesspools and unprotected food supplies. Health officers are requested to report such conditions to this office, which will give its services freely in assisting them to abate such nuisances.

The Board has now employed Mr. E. T. Ross, of many years experience in the U. S. Public Health Service, as Sanitary Inspector. One of Mr. Ross' chief duties will be to co-operate with the health officers of the cities and counties in their efforts to abate nuisances which tend to spread typhoid fever. This office, working through its local health officers and Mr. Ross, intends to devote much attention to this important matter.

RABIES.

This subject has been too well covered by Dr. Sawyer's several reports for the Secretary to feel called upon to discuss it from any of its scientific aspects, but in passing this terrible, but at the same time preventable disease, the writer desires to make the following remarks:

This office regards the passage and enforcement of local ordinances requiring the muzzling of canines in infected districts of the utmost

importance, and will support the efforts of the local health officers to the limit of its powers.

It is not intended here to enter into a discussion of the *need*; the evidence that the disease is prevalent among dogs in certain parts of California is sufficient to convince any tribunal within the borders of this State. Nor is it our intention to express an opinion as to whether it is better to legislate for the convenience of dogs or for the lives of children; we may feel called upon, if the occasion arise, to discuss this matter with the mother voters of infected districts at some later date—but not here. Nor, as a lover of dogs, will the writer here urge that it is better for the dogs to be inconvenienced than to die in horror. The Secretary *will* state, however, that if any county fails to protect its citizens from this disease, he will do all in his power to have the general laws of the State applied from the time the matter comes to his attention until the following meeting of the Board, and shall then recommend to that body that such application be continued until the county has adopted a proper ordinance.

HOOKWORM.

A great deal has been said in recent years of the danger of this State becoming infested by the hookworm parasite. While this has not been borne out, probably, by data that we have at present, we must bear in mind that we possess a large area of sandy soil similar to that in which, in other countries, experience has demonstrated this disease is especially prone to spread. We also have a large mining population which is notably susceptible to this parasite.

With these conditions favoring its development and spread, once thoroughly introduced, we must also remember that we have at present immigrants from Asia, where the disease is very common, and Portuguese colonists showing a high percentage of infection, coming to us after a short stay in the Hawaiian Islands.

Later, when the canal opens, we will have an influx of immigrants from the Mediterranean countries, where the parasite is common. Besides these foreign sources of infection, we have constant railway communication with many areas of our Southern States, where the percentage of infected persons is very high.

Up to the present there has been no great influx of persons from these districts of the classes that are ordinarily infected (poorer members of farming communities), but we do have some, especially negroes, and they may play a part in the introduction of the parasite.

With these ideas in view, this office has requested that Professor C. W. Stiles visit the State at his earliest convenience, and make a special survey from a hookworm infection standpoint.

In connection with this subject, the foreign translation from the Italian is of interest to the health authorities of the State.

"The Measures Against Hookworm in Italy," by Pieraccini ('Il Levaro, May 30, 1913), states that a commission appointed by Parliament for the study of the proposal and establishment in Italy of a monopoly of the State for the sale of phymol, makes the following observations: That hookworm infection is an occupational disease affecting almost exclusively those who have to work with the soil, such as gardeners, farmers, miners, etc. It is also a disease which affects

chiefly the lower grades of society, not only lowering the resistance of the adult, but also stamping the children of infected adults, as is observed by the retarded or arrested development of the former. The tendency of this disease in Italy has been to spread. Not only is this true of the European varieties, but returning emigrants have brought back the American hookworm, *Necator Americanus*. The measures recommended are the manufacture, sale and administration by the State of phymol, which drug is prompt and efficient in its action against this disease, and is not dangerous when properly administered to children. The State sells this drug for ten centimes a dose, in the same manner that they distribute quinine at low cost in malarial districts. They may recommend that an intelligent search be made among those engaged in certain occupations, to learn if they are carriers of the disease, to recommend sanitary methods of sewage disposal, especially in mines and places where this disease is most often found.

DIPHTHERIA.

This disease is widespread throughout the State. During the month of January 202 cases were reported in 28 counties. From the numbers of population considered there has been no very large outbreak during the month. There exists a sufficient number of cases, however, to justify health officers to urge the physicians of their respective localities to promptly report all cases that come under their observation, also in order that cases may be recognized with greater accuracy to urge that these physicians send cultures from all suspected throats to the Hygienic Laboratory at Berkeley. Not only should such cultures be sent during the active stage of the disease, but also during convalescence period before the quarantine restrictions have been removed. Frequent swabs should also be made from the throats of other occupants of the house, such as parents, brothers, sisters, nurses, attendants, etc. It is only in comparatively recent times that we fully grasp the fact that this is one of the diseases that is carried by the non-ill bacilli carrier and the mild unrecognized cases of the disease. Until we have, by the means above indicated, discovered a great percentage of these dangerous cases and adopted proper quarantine measures against them, there is little hope of eradication, even in the restricted sense of the term.

Of all the many difficult problems that come up for public health administration, probably one of the least easy to solve satisfactorily is a case of bacilli carriers. It is apparent that upon theoretical grounds, at least, we should keep a person quarantined so long as he contains micro-organisms dangerous to his fellows. In the case of diphtheria this means we should keep him under surveillance as long as bacilli are found in his throat. The practical drawback to this plan is that it often requires restriction of the liberty of the carrier for weeks, months or even years. For this reason any measures that are claimed to succeed in removing the pathogenic micro-organisms from the throats of diphtheria patients are worthy of combined clinical and laboratory investigation.

The following conclusions contained in an article entitled "The Treatment of Diphtheria Carriers," by Henry Albert (A. M. A., volume LXI, September 27, 1913, page 1027) is of interest to health officers:

1. The length of time during which patients who have had diphtheria continue to carry diphtheria bacilli in the nose and throat after all

clinical evidence of the disease has disappeared, and the frequency with which diphtheria carriers are found among persons who have never had the disease, renders it important in the interest of both the individual and the public health to rid carriers of the specific organisms as quickly as possible.

2. It is obvious from the large number of methods proposed for the removal of diphtheria bacilli from diphtheria carriers that no one method has proven satisfactory.

3. The use of the various antiseptics, gargled or sprayed, is of doubtful value in relieving the carrier condition, although they do no doubt destroy many germs with which they come in contact and therefore lessen the infectivity of the carrier.

4. During the past few years, good results have been obtained by myself and a number of other observers, by the use of a spray of a culture staphylococci.

5. I have obtained my best results by the treatment of the crypts of the tonsils with a solution of silver nitrate (from 5 to 10 per cent) applied by means of a thin flexible applicator, combined with a mild alkaline and antiseptic spray (such as Seiler's solution) for the nasal cavity, and a 1 per cent solution of hydrogen peroxide as a mouth-wash and gargle.

6. There is great need of applying the different methods of treatment aiming at ridding diphtheria carriers of the specific micro-organisms in a well-controlled manner in a large series of cases.

7. If it is found that diphtheria bacilli are frequently found in the urine of convalescents, more attention should be given to the hygienic aspects connected with this condition.

The matter is to be brought before the meeting of the Board, February 7th, to determine what policy will be adopted relative to diphtheria carriers, and health officers will be notified as soon as this decision has been reached.

REPORT OF THE BUREAU OF ADMINISTRATION FOR
JANUARY, 1914.

JOHN F. LEINEN, Director.

In addition to the general routine work of the Board the following matters were given attention:

The Sanitary Inspector has made an inspection of the Squirrel Inn and the Enterprise Hotel in Sacramento, and his reports and recommendations are on file.

The steamer "Grace Dollar," bound from Seattle with a cargo of lumber, docked at the Sacramento wharf, and the Secretary immediately wired the Federal quarantine officer at San Francisco to know if the vessel had been fumigated at Seattle. A reply was received advising that the vessel wear rat guards while docked here. The Secretary ordered this done, and the order was complied with, but, it was found later, on investigation, that the order was being ignored. The Sanitary Inspector was detailed to make an investigation, and reported that the master of the vessel informed him that the rat guards had been removed when the vessel had been hauled farther along the wharf, but that they would be immediately replaced and that he would breast off six feet from the wharf, as required by the Federal quarantine regulations.

Complaint was received (anonymous) regarding sanitary conditions of the El Centro jail. Dr. Virgil McCombs, Health Officer at El Centro, was requested to investigate, and reports the jail in very good condition.

Dr. W. S. Davis, Health Officer of Corona, has requested assistance from this Board in dealing with the housing problem at that place. Dr. Davis has been notified that, as soon as matters can be so arranged, the Sanitary Inspector will visit Corona and confer with the authorities there as to conditions.

Mr. C. A. Stebbins, of the Chico Normal School, has been in correspondence with the Board with reference to securing assistance in a sanitary survey of milk supplies in Butte County, and also visited the office and conferred personally with the Secretary.

Dr. H. N. Cross, of Stockton, forwarded a death certificate for a seven-year-old child, diagnosis—relapsing fever. The Secretary wrote Dr. Cross for further information, and Dr. Cross replied that the blood examination showed the spirillum, and that the child developed pneumonia about two weeks before death.

Dr. S. S. Bogle, Health Officer of Sonoma County, telephoned on January 13th that the board of supervisors intended to repeal the muzzling ordinance, and wanted to know if the Board would enforce chapter 369, Statutes 1913, if this ordinance were repealed. The Secretary replied that, if the ordinance were repealed, this office would enforce all State laws pertaining to rabies until the Board meets. Dr. Sawyer was instructed to proceed to Santa Rosa to discuss the matter with the board of supervisors. After this meeting, the board of supervisors voted unanimously to retain the ordinance.

With reference to a successor for Dr. Black, upon recommendation of the Executive Committee, Dr. Sawyer was detailed to go to Los Angeles to look over the situation and recommend a successor. As a result of this investigation, Dr. Sawyer recommended the name of Dr. Walter V.

Brem as Dr. Black's successor, effective January 26, 1914, with compensation at \$50 per month.

In regard to appointment of boards of health and health officers, instructions have been forwarded to city and county clerks of municipalities and counties where there are no health officers.

Letters were addressed to various railroad companies with a view to holding a conference to discuss the matter of ventilation in coaches. Replies have been received and are on file.

Mr. E. L. Armstrong, city clerk of Grass Valley, reported to this office that four cases of diphtheria occurred in the schools at that place during December, on account of which the schools were closed. Upon reopening the schools in January, four more cases appeared, and this Board was appealed to for assistance in stamping out the disease.

The matter of an appropriation of \$5,000 from the contagious disease appropriation, for the purpose of paying expenses incurred in connection with a field survey and for the payment of salaries for employees for same, was taken up with the Board of Control by the Secretary and approval of that Board for such appropriation was obtained.

The Attorney has rendered an opinion to the effect that the sale of milk from tuberculous cows can be prohibited, the State Dairy Bureau having ample authority so to do.

The Secretary has been in correspondence with Professor W. B. Herms, entomologist of the University of California, relative to the possible presence in California of the mosquito known as *Stegomyia calopus*. Professor Herms has replied that, so far as he has knowledge, none of this species is to be found in California at the present time.

The Director of the Hygienic Laboratory has submitted a special report on a case of human rabies at Oxnard.

Dr. Brett Davis, Health Officer of Merced, reports the serious pollution of the water supply of Merced, and has requested the assistance of the Sanitary Inspector in ascertaining the source of infection. Dr. Davis has been informed that, as soon as weather conditions permit, Mr. Ross will be detailed to make an inspection of the watershed of the Merced city supply.

Dr. H. E. Piper, City Health Officer of Santa Cruz, reported smallpox epidemic in that city. He was instructed to enforce the vaccination act of 1911.

Dr. S. Schiro, of San Francisco, reports to this office that he has under treatment at St. Mary's Hospital an Italian affected with trichinosis, the patient having come from Hardy Creek, Mendocino County. The Secretary is in correspondence with the Health Officer of Mendocino County in an effort to prevent the further spread of the disease.

Dr. J. P. Frizell reports sanitary conditions at Ione as being very unsatisfactory. Dr. Howard, Director of the Department of Tuberculosis, made an inspection of conditions and reports the town without a sewerage system.

The Director of the Department of Tuberculosis has filed a report on a sanitary inspection of the State Prison at Folsom.

Mr. T. Thorsen, of Stockton, filed a complaint regarding the sanitary conditions of the camps on the Modesto Irrigating Project at La Grange. The Health Officer of Stanislaus County reports, after investigation, that the camps are fairly clean and that those in charge had promised to clean them more.

The Secretary held a conference with the Immigration and Housing Authorities at San Francisco looking toward plans for the proper care and housing of immigrants who will be attracted to this State upon the opening of the Panama Canal.

Mrs. Richardson, who has property interests in Truckee, requests an investigation of the pollution of the Truckee River with a view to preventing, if possible, a recurrence of the typhoid epidemic of last summer. Mrs. Richardson has been advised that, as soon as matters can be so arranged, the Sanitary Inspector will visit that section for the purpose of making a sanitary survey.

The Secretary is in receipt of a communication from the Washington State Board of Health to the effect that a conference between the governor, the federal authorities, the mayors and health officials of the various port cities of that State has been called for the purpose of outlining a plan for the eradication of plague from Washington.

REPORT OF THE BUREAU OF TUBERCULOSIS FOR JANUARY, 1914.

BURT F. HOWARD, M.D., Director.

Inspections were made during January of the following institutions: Berkeley Dispensary, Berkeley; Oakland King's Daughters' Home, Oakland; State Hospital, Agnews; The Oaks, Los Gatos; County Jail, San Jose; County Hospital, County Jail, and City Jail, Santa Cruz; County Hospital, Hollister; California Sanatorium, Belmont; County Hospital, San Mateo; French Hospital, Southern Pacific Hospital, San Francisco; Arequipa, Fairfax; State Prison, San Quentin; Soldiers' Home, Yountville; State Hospital and County Hospital, Napa; County Hospital, Martinez.

In each place visited the usual plan of advising with the institution officials regarding methods and policies has been pursued, and of visiting the local Health Officer with a view to promoting registration of tuberculosis.

A lecture to Sacramento nurses was given January 7th, the subject being "A New Movement in Public Health Work." The object of the lecture was to stimulate interest in social service nursing and dispensary work.

A visit was made to Folsom January 28th to advise with the officers regarding the care of tuberculous inmates.

A paper was presented before the San Joaquin County Medical Society January 30th on "The Tuberculosis Commission and the Tuberculosis Bureau." The purpose of the lecture was to interest the physicians of the county in tuberculosis registration.

REPORT OF THE BUREAU OF REGISTRATION OF NURSES FOR JANUARY, 1914.

ANNE C. JAMMÉ, R.N., Director.

At the regular meeting of the Board held on January 3d, the credentials of 207 applicants for the certificate of registered nurse were passed upon, and certificates authorized to be issued.

Regulations for accrediting training schools for nurses in the State will be passed upon by the Board, ordered printed and placed in circulation. This system of instruction will serve as a guide in arranging courses of study for schools of nursing. It will also serve to establish a uniform method of instruction and training, thereby assisting in building up a practical system of education for students of nursing in California.

The following considerations are recommended with a view of raising the standard and efficiency of the training schools:

1. When a school is so situated and endowed with facilities as to be able to enlarge the curriculum, it is unhesitatingly recommended to do so.
2. Where schools are small and unable to obtain the necessary equipment they shall form a connection with a high school or college for some of the required studies, as, chemistry, hygiene, anatomy or dietetics.
3. Whenever practicable, lectures and classes should be held during the day instead of the evening.
4. There shall be a study room provided where there is absolute quiet.
5. There shall also be a recitation and lecture room.
6. There shall be special time set aside each day for study.
7. Emphasis shall not be placed on the number of lectures, but on classes, demonstrations, and laboratory work; also, on the written and oral quiz on each lecture.
8. There shall be a special instructor of nurses in each school. Teaching requires time for preparation which the Superintendent of Nurses, who may also be the Superintendent of the Hospital, is unable to give to it.
9. The classroom study shall be properly correlated with the practical opportunity offered in the wards and rooms of the hospital.
10. Good reference libraries shall be established, and a definite outline of required reading on subjects allied to nursing prescribed during the course.

REPORT OF THE BUREAU OF THE HYGIENIC LABORATORY FOR JANUARY, 1914.

WILBUR A. SAWYER, M.D., Director.

Changes in Personnel.

After a continuous service of over four years as bacteriologist in charge of the Southern Branch of the State Hygienic Laboratory, Dr. Stanley P. Black has asked the State Board of Health to release him from further duty. The resignation took effect on January 26, 1914. By taking charge of the Southern Branch Laboratory in November, 1909, and maintaining the high standards of its work, Dr. Black has rendered a service of great value to the people of California.

Dr. Black was succeeded on January 26, 1914, by Dr. Walter V. Brem, and the Southern Branch Laboratory is now situated at 1209 Brockman Building, Seventh street and Grand avenue, Los Angeles. Dr. Brem has held the following positions: Chief of the Medical Clinic of Colon Hospital, 1907–1911; Physician and Acting Pathologist of the Board of Health Laboratory of the Canal Zone, 1905–1907. At the present time he is Professor of Pathology and Bacteriology in the Los Angeles Branch of the Medical Department of the University of California.

Miss Grace A. Macmillan began service as Laboratory Assistant in the State Hygienic Laboratory in Berkeley on January 20, 1914. She will assist the Director in the serological work of the laboratory. From November, 1912, up to her acceptance of the position in the State Hygienic Laboratory, Miss Macmillan was an assistant in the United States Public Health Service Laboratory in San Francisco, and was specially occupied in making serological tests.

Apparent Recovery of a Human Case of Glanders.

Almost a year ago, in January, 1913, the Director of the State Hygienic Laboratory investigated a case of glanders in a man and definitely identified the disease by physical examination and by laboratory tests. Since then the case has been under treatment by his family physician. Recently the physician reported the case as cured and requested the State Board of Health to make an investigation looking forward to release from quarantine. In the month of January, 1914, the Director of the Laboratory again saw the case. Physical examination showed that the lesions had healed and laboratory tests failed to find the glanders bacillus in nose or throat. As far as could be ascertained the man had entirely recovered.

Division of Biological Examinations.

Summary of Examinations made in the California State Hygienic Laboratory during the month of January, 1914.

Condition suspected	Positive	Negative	Inconclusive	Total
Main Laboratory at Berkeley:				
Anthrax -----		1		1
Diphtheria -----	28	35	2	65
Gonococcus infection -----	11	6	2	19
Malaria -----		3		3
Rabies -----	44	16		60
Tuberculosis -----	9	20		29
Typhoid -----	3	10		13
Water pollution -----	1	1		2
Miscellaneous -----		5	4	9
				201
Northern Branch at Sacramento:				
Diphtheria -----	23	32		55
Tuberculosis -----		7		7
Typhoid -----	1	3	1	5
				67
San Joaquin Valley Branch at Fresno:				
Diphtheria -----	1	9		10
Tuberculosis -----		1		1
Typhoid -----		4		4
				15
Southern Branch at Los Angeles:				
Diphtheria -----	7	15	1	23
Typhoid -----		1		1
				24
Total number of examinations -----				307

Division of Preventive Therapeutics.

Pasteur Treatment for the Prevention of Rabies by the State Hygienic Laboratory during the month of January, 1914.

	Treatment commenced	Treatment completed
Main Laboratory at Berkeley -----	25	17
Northern Branch at Sacramento -----	0	2
San Joaquin Valley Branch at Fresno -----	0	0
Southern Branch at Los Angeles -----	6	3
Laboratory of Sacramento Board of Health, by deputized bacteriologist -----	0	0
Laboratory of San Francisco Board of Health, by deputized bacteriologist -----	2	0
Laboratory of Los Angeles Board of Health, by deputized bacteriologist -----	0	0
Laboratory of Letterman General Hospital, Presidio, by deputized bacteriologist -----	0	0
	33	22

Public Health Instruction.

Participation in Instruction in Public Health during January, 1914.

Main Laboratory at Berkeley:	
Bacteriological instruction outfits sent out -----	1
Bacteriological instruction outfits in use -----	29
Lectures or talks by the Director -----	0
Lectures or talks by the Chief Bacteriologist -----	1

Division of Epidemiological Investigations.

Epidemiological Investigations during January, 1914.

Main Laboratory at Berkeley:

Special investigations by the Director.....	5
Investigation of a recovered human case of glanders at Hayward.	
Investigation of smallpox at Santa Cruz.	
Investigation of the needs of the Southern Branch Laboratory.	
Investigation of the situation with regard to rabies in Sonoma County.	
Continuation of the investigation of the methods of transmission of poliomyelitis.	
Special investigation by the Chief Bacteriologist.....	1
Continuation of the investigation of the effect of quinine on rabies in dogs.	

REPORT OF THE BUREAU OF FOODS AND DRUGS FOR
JANUARY, 1914.

M. E. JAFFA, Director.

The work of the Bureau of Food and Drugs during the past month has consisted of the usual routine.

The correspondence has been large and indicative of the spirit of co-operation between the manufacturers, dealers, and the State Board of Health.

There have been submitted to the Laboratory during the past month, one hundred and seventy samples of foods, drugs and waters. A notable percentage of these represent the food and drug products furnished the state institutions.

There is no special mention to be made of any particular food product as the list submitted is fully representative of foods in general.

It is encouraging to report that Inspectors find but very few samples of canned peas or other vegetables colored with copper sulfate. It is also to be noted that Inspectors find that the dealers in general are in sympathy with the State Board of Health in enforcing the law against the sale of absinthe, and that few samples can be found.

During the past years there have been on sale in this State extracts not up to standard, in that, for instance in the case of lemon extract, the percentage of oil in place of being 5 per cent, as called for by the standard, will be considerably less. At times lemon extracts have been found to contain less than 1 per cent of lemon oil, and still be marked dilute. The manufacturers have stated that the U. S. Department of Agriculture have allowed such extracts to be marketed provided they are labeled "dilute." Advices from the Bureau of Chemistry, Department of Agriculture, would seem to indicate that the Board of Food and Drug Inspection do not countenance such a label as indicated by the following extract: "The Board is of the opinion that sub-standard extracts should bear a plain statement on the label to show their actual strength, some such phrase as one half strength, or one fourth strength, etc. This statement of strength should so appear on the package in color and background that it will be as clearly legible as the main portion of the label."

The State Board of Health will, therefore, consider as mislabeled and misbranded, extracts which are found upon examination to be below standard, and which are labeled "dilute" without indicating on the label the percentage of dilution.

Notices of Judgments.

The following list of notices of judgments is at hand from the Department of Agriculture, at Washington, and interested parties wishing any separate notice should address the Director of the State Food and Drug Laboratory, University of California, Berkeley, California:

- No. 2628—Misbranding of Syrup.
- No. 2629—Adulteration of Gelatine.
- Nos. 2630, 2641, 2646, 2653, 2654, 2655—Adulteration of Oranges.
- No. 2631—Misbranding of Oil of Wintergreen.
- Nos. 2632, 2638—Adulteration and Misbranding of Champagne.
- No. 2633—Adulteration of Butter.
- No. 2634—Misbranding of West Baden Sprudel Water.
- No. 2635—Adulteration of Tomato Pulp.
- No. 2636—Adulteration and Misbranding of Lemon Oil.
- No. 2637—Misbranding of Tomato Sauce.
- No. 2639—Adulteration of Kazoo Mints.
- No. 2640—Adulteration and Misbranding of Beer.
- No. 2642—Misbranding of Tomato Sauce.
- Nos. 2643, 2647, 2652—Adulteration and Misbranding of Malaga Type Wine.
- Nos. 2644, 2660—Adulteration and Misbranding of Cheese.
- No. 2645—Misbranding of Vinegar.
- No. 2648—Misbranding of Tomato Conserve.
- No. 2649—Adulteration and Misbranding of Bran.
- No. 2650—Adulteration and Misbranding of Horse Feed.
- No. 2651—Adulteration and Misbranding of Wine.
- No. 2656—Adulteration of Apple Cider.
- Nos. 2657, 2664—Adulteration of Milk.
- Nos. 2658, 2659—Adulteration of Cream.
- Nos. 2662, 2665, 2666, 2667—Adulteration of Cream.
- Nos. 2661, 2663, 2668—Adulteration and Misbranding of Extract of Lemon.

Cases Referred to District Attorneys January 12, 1914.

Article	Violation	Manufacturer	Accused dealer	Locality
Chopped meat -----	Adulterated. Contained sulphites -----	-----	S. Brown Meat Co., Inc.	Vallejo
Eggs -----	Mislabeled. Not fresh eggs -----	-----	C. L. Bowen -----	Marysville
Chopped meat -----	Adulterated. Sulphur dioxide -----	-----	M. Rosenthal -----	N. Annandale
Coffee extract -----	Mislabeled. Not coffee extract -----	-----	Jenks-Steen Co. -----	Los Angeles
Orange extract -----	Adulterated. Substitution of other materials.	-----	Jenks-Steen Co. -----	Los Angeles
Pure cider vinegar --	Mislabeled. Sample is an imitation -----	-----	I. Mori, Prop., Panama	Los Angeles
Hair tonic -----	Adulterated. Substitution of other materials.	Packard Mfg. Co. ---	Grocery.	Los Angeles
T. Duffy's Only -----	Mislabeled and adulterated. Not cider vine-	-----	Steinen Supply Co. ---	Los Angeles
Elixir of Life -----	gar. Substitution of other materials.	-----	H. R. Williams -----	Los Angeles
Purified Water.	Adulterated. Contains methyl alcohol -----	-----	-----	-----
Canned peas -----	Mislabeled. Not elixir, not purified water and	-----	-----	-----
	not made by Duffy.	-----	H. N. Edlin, Inc. ---	Berkeley
Apple cider vinegar --	Adulterated. Sample contains sulphate of	-----	-----	-----
	copper.	-----	Reed Pickle Works	San Francisco
	Mislabeled and adulterated. Not cedar vine-	-----	(Guarantor).	-----
	gar. Substitution of other materials.	-----	-----	-----

REPORT OF BUREAU OF VITAL STATISTICS.

GEORGE D. LESLIE, Director.

L. V. BOYLE, Births, Deaths, Marriages.

G. P. JONES, Morbidity Returns.

Births, Deaths and Marriages for December.*

State Totals and Annual Rates.—The following table shows for California as a whole the birth, death and marriage totals for the current and preceding months in comparison with those for the corresponding months of last year, as well as the annual rates per 1,000 population represented by the totals for the current and preceding months. The rates are based on an estimated midyear population of 2,671,491 for California in 1913, the estimate having been made by the Census Bureau method with slight modifications.

Birth, Death and Marriage Totals, with Annual Rates per 1,000 Population for Current and Preceding Months for California: December.

Month	Monthly total		Annual rate per 1,000 population: 1913
	1913	1912	
December—			
Births -----	4,000	3,578	17.6
Deaths -----	3,492	3,581	15.4
Marriages -----	2,682	3,197	11.8
November—			
Births -----	3,641	3,236	16.6
Deaths -----	2,980	2,992	13.6
Marriages -----	2,517	2,773	11.5

The December total was much greater this year than last for births, while somewhat less for deaths and considerably less for marriages in 1913 than in 1912.

County Totals.—The first table which follows below shows the monthly birth, death and marriage totals for the principal counties of the State, the list being limited to counties having a population of at least 25,000 according to the Federal Census of 1910. Totals are also shown for San Francisco and the other bay counties (Alameda, Contra Costa, Marin, and San Mateo), as well as for Los Angeles and Orange counties together.

City Totals.—The second of the following tables gives the birth and death totals for the principal freeholders' charter cities, the list including all chartered cities with a census population of at least 15,000 in 1910. Totals are given likewise for San Francisco in comparison with Oakland, Alameda, and Berkeley, the three cities adjoining one another on the east shore of San Francisco Bay, as well as for Los Angeles in comparison with neighboring chartered cities (Long Beach, Pasadena, Pomona, and Santa Monica).

*NOTE.—The present report is for the month preceding, but one. This order must be followed hereafter because of the publication of the Bulletin during the early part of the month, before the tabulation of records for the preceding month is completed.

Birth, Death and Marriage Totals, for Principal Counties: December.

County	December, 1913		
	Births	Deaths	Marriages
California -----	4,000	3,492	2,682
Counties of more than 25,000 population (1910):			
Alameda -----	387	358	237
Butte -----	25	32	24
Contra Costa -----	68	32	7
Fresno -----	159	94	103
Humboldt -----	27	34	31
Kern -----	65	45	54
Los Angeles -----	1,067	835	639
Marin -----	30	42	67
Orange -----	76	56	115
Riverside -----	63	51	34
Sacramento -----	136	127	86
San Bernardino -----	97	85	49
San Diego -----	152	131	134
San Francisco -----	640	633	474
San Joaquin -----	62	90	78
San Mateo -----	40	29	25
Santa Barbara -----	67	28	25
Santa Clara -----	146	121	69
Santa Cruz -----	32	23	16
Solano -----	34	23	9
Sonoma -----	54	69	40
Tulare -----	59	48	34
Selected groups:			
San Francisco and other bay counties-----	1,165	1,094	810
Los Angeles and Orange counties-----	1,143	891	754

Birth and Death Totals, for Principal Cities: December.

City	December, 1913	
	Births	Deaths
Freeholders' charter cities-----	2,420	2,136
Cities of more than 15,000 population (1910):		
Alameda -----	37	37
Berkeley -----	85	53
Fresno -----	47	36
Long Beach -----	37	38
Los Angeles -----	739	541
Oakland -----	232	190
Pasadena -----	59	49
Riverside -----	21	29
Sacramento -----	120	117
San Diego -----	120	99
San Francisco -----	640	633
San Jose -----	53	36
Stockton -----	12	43
Selected groups:		
San Francisco -----	640	633
Oakland, Alameda and Berkeley-----	354	280
Totals, bay cities-----	994	913
Los Angeles -----	739	541
Neighboring cities -----	118	115
Totals -----	857	656

Causes of Death.—The following table shows the classification of deaths in California for the current month, in comparison with the preceding month:

Deaths from Certain Principal Causes, with proportion per 1,000 Total Deaths, for current and preceding month, for California: December.

Cause of death	Deaths: December	Proportion per 1,000	
		December	November
ALL CAUSES -----	3,492	1,000.0	1,000.0
Typhoid fever -----	33	9.5	18.8
Malarial fever -----	3	0.9	3.4
Smallpox -----			0.3
Measles -----	5	1.4	0.7
Scarlet fever -----	8	2.3	4.7
Whooping-cough -----	11	3.2	1.7
Diphtheria and croup -----	26	7.4	7.7
Influenza -----	27	7.7	5.0
Other epidemic diseases -----	21	6.0	4.7
Tuberculosis of lungs -----	374	107.1	118.8
Tuberculosis of other organs -----	71	20.3	20.5
Cancer -----	260	74.5	72.2
Other general diseases -----	167	47.8	48.0
Meningitis -----	21	6.0	9.7
Other diseases of nervous system -----	319	91.4	91.6
Diseases of circulatory system -----	583	166.9	141.9
Pneumonia and broncho-pneumonia -----	350	100.2	70.8
Other diseases of respiratory system -----	87	24.9	22.8
Diarrhea and enteritis, under 2 years -----	87	24.9	34.2
Diarrhea and enteritis, 2 years and over -----	15	4.3	11.4
Other diseases of digestive system -----	163	46.7	64.4
Bright's disease and nephritis -----	195	55.8	54.7
Childbirth -----	27	7.7	8.4
Diseases of early infancy -----	119	34.1	42.0
Suicide -----	82	23.5	18.8
Other violence -----	290	83.1	77.5
All other causes -----	148	42.4	45.3

In December there were 583 deaths, or 16.7 per cent of all, from diseases of the circulatory system and 445, or 12.7 per cent, from various forms of tuberculosis, heart disease thus leading tuberculosis greatly.

Other notable causes of death in December were: Diseases of the respiratory system, 437; violence, 372; diseases of nervous system, 340; diseases of digestive system, 265; cancer, 260; Bright's disease and nephritis, 195; and epidemic diseases, 134.

The deaths from epidemic diseases were as follows: Typhoid fever, 33; influenza, 27; diphtheria and croup, 26; whooping-cough, 11; scarlet fever, 8; measles, 5; and all other epidemic diseases, 24.

The deaths from the four leading epidemic diseases reported for the month were distributed by counties as follows:

Typhoid fever		Influenza		Diphtheria and croup	
Fresno	2	Alameda	2	Alameda	7
Kern	1	Butte	3	Fresno	2
Lassen	1	Fresno	1	Kern	3
Los Angeles	8	Humboldt	1	Los Angeles	6
Modoc	1	Kern	1	Merced	1
Napa	1	Kings	2	Nevada	1
Orange	1	Los Angeles	4	San Bernardino	1
Placer	1	Merced	1	San Diego	1
Riverside	1	Nevada	1	San Francisco	4
Sacramento	1	Orange	2		
San Bernardino	1	Sacramento	1	Total	26
San Diego	2	San Bernardino	1	Whooping-cough	
San Francisco	6	San Diego	1	Humboldt	1
San Joaquin	2	San Francisco	2	Lassen	1
Solano	1	San Joaquin	1	Los Angeles	4
Sonoma	1	Santa Cruz	1	San Francisco	3
Stanislaus	1	Tulare	1	Santa Clara	1
Tehama	1	Yolo	1	Siskiyou	1
Total	33	Total	27	Total	11

Geographic Divisions.—The following table presents data for geographic divisions, including the metropolitan area, or San Francisco and the other bay counties (Alameda, Contra Costa, Marin, and San Mateo), in comparison with the rural counties of Northern and Central California:

Deaths from Main Classes of Diseases, for Geographic Divisions: December.

Geographic division	Deaths: December										
	All causes	Epidemic diseases	Tuberculosis (all forms)	Cancer	Diseases of nervous system	Diseases of circulatory system	Diseases of respiratory system	Diseases of digestive system	Bright's disease and nephritis	Violence	All other causes
THE STATE	3,492	134	445	260	340	583	437	265	195	372	461
Northern California	395	23	36	26	47	61	49	29	21	50	53
Coast counties	203	7	26	14	26	36	22	13	12	22	25
Interior counties	192	16	10	12	21	25	27	16	9	28	28
Central California	1,870	68	222	134	159	340	257	147	105	199	239
San Francisco	633	19	83	57	35	145	85	38	38	70	63
Other bay counties	461	13	47	31	39	88	72	31	27	51	62
Coast counties	203	3	20	19	23	34	27	20	10	23	24
Interior counties	573	33	72	27	62	73	73	58	30	55	90
Southern California	1,227	43	187	100	134	182	131	89	69	123	169
Los Angeles	835	30	135	71	89	134	88	53	41	67	127
Other counties	392	13	52	29	45	48	43	36	28	56	42
Northern and Central California	2,265	91	258	160	206	401	306	176	126	249	292
Metropolitan area	1,094	32	130	88	74	233	157	69	65	121	125
Rural counties	1,171	59	128	72	132	168	149	107	61	128	167

Sex and Age Periods.—The proportion of the sexes among the 3,492 decedents in December was: Male, 2,175, or 62.3 per cent; and female, 1,317, or 37.7 per cent.

The following table shows the age distribution by numbers and per cents of deaths classified by sex:

Deaths Classified by Sex and Age Periods, with Per Cents by Age Periods, for California: December.

Age period	Deaths			Per cent		
	Total	Male	Female	Total	Male	Female
All ages -----	3,492	2,175	1,317	100.0	100.0	100.0
Under 1 year-----	344	208	136	9.9	9.6	10.3
1 to 4 years-----	127	64	63	3.6	2.9	4.8
5 to 14 years-----	99	50	49	2.8	2.3	3.7
15 to 24 years-----	167	97	70	4.8	4.5	5.3
25 to 34 years-----	326	212	114	9.3	9.7	8.7
35 to 44 years-----	382	251	131	10.9	11.5	9.9
45 to 54 years-----	452	304	148	13.0	14.0	11.2
55 to 64 years-----	465	318	147	13.3	14.6	11.2
65 years and over-----	1,130	671	459	32.4	30.9	34.9

This table shows that relatively more females than males died at the age periods under 25 years as well as at 65 years and over, while relatively more males than females died at the age periods from 25 to 64 years.

Occupations.—The table below gives, for deaths 15 years and over, the number of men and women for whom some occupation was reported in contrast with those for whom no gainful occupation was shown.

Deaths, fifteen years and over, Classified by Sex, and Occupation with Per Cents by Sex, for California: December.

	Deaths			Per cent male	Per cent female
	Total	Male	Female		
15 years and over-----	2,922	1,853	1,069	63.4	36.6
Occupation reported -----	1,678	1,573	105	93.7	6.3
No gainful occupation-----	1,244	280	964	22.5	77.5

Of the 1,678 decedents for whom occupations were reported the males numbered 1,573, or 93.7 per cent, and the females only 105, or 6.3 per cent.

The following table shows the distribution of male decedents 15 years and over, engaged in the main kinds of occupation:

Deaths of Males fifteen years and over engaged in Gainful Occupations, Classified by kind of occupation, with Per Cents, for California: December.

Kind of occupation	Males 15 years and over	
	Deaths	Per cent
All occupations -----	1,573	100.0
Professional -----	88	5.6
Clerical and official-----	124	7.9
Mercantile and trading-----	106	6.7
Public entertainment-----	53	3.4
Personal service, police and military-----	51	3.2
Laboring and servant-----	306	19.5
Manufacturing and mechanical industry-----	351	22.3
Agriculture, transportation and other outdoor pursuits-----	484	30.8
All other occupations-----	10	0.6

Of the 1,573 male decedents for whom occupations were reported, 484, or 30.8 per cent, were engaged in agriculture, transportation, and other outdoor pursuits, 351, or 22.3 per cent, in manufacturing and mechanical industry; 306, or 19.5 per cent, in laboring and servant work; and altogether 432, or 27.4 per cent, in professional, clerical and official, mercantile and trading, and all other occupations.

It should be noted that the figures on deaths occurring in different occupations are necessarily affected by the fact that in California a large number of men are engaged in agriculture and other outdoor pursuits, while relatively few follow professional and similar occupations which show small numbers of deaths.

MORBIDITY REPORT FOR JANUARY.

There were 121 cases of smallpox reported to this office during January, the outbreaks occurring in Lake County at Lakeport, Santa Clara County at Cupertino and San Jose, and Santa Cruz County at Santa Cruz and Boulder Creek. San Francisco and Los Angeles reported 12 and 11 cases respectively. Fifty-five of these cases were never successfully vaccinated and information is lacking for 52 cases. This information has been asked for, but the physicians concerned have not sent the facts as yet. The outbreak in Lake County has been closely associated with cases of chickenpox and because of difficult diagnosis a great many cases were unrecognized for some time.

There were very few cases of typhoid fever reported, with the exception of 79 cases in Sacramento. Most of these Sacramento cases occurred in the older part of the city, the section receiving its water supply from the Sacramento River. By a process of elimination it was learned that the source of infection was in the river water, as no cases occurred in the outlying districts which receive water for domestic purpose from deep wells; milk supplies being investigated with negative results, as well as numerous vegetable gardens. San Francisco reported an unusually large number for this season of the year, 33 cases having occurred there during January. Not all of these were of local origin, however.

There was a considerable increase in the number of cases of whooping-cough, 187 cases having been reported.

A considerable number of cases of tuberculosis were reported, the total number being 484. It is worthy of comment that physicians in California are taking a deeper interest in reporting cases of this disease and it is hoped that within a short time complete registration may be effected.

There were about the same number of cases of diphtheria and scarlet fever reported as is usual at this time of the year. Twenty-eight out of 58 counties in the State, however, reported diphtheria, the disease being very widespread at the present time.

Two cases of leprosy were reported, one in San Francisco and one in San Bernardino. The San Bernardino case made the fourth case to be reported from that county.

As is to be expected, pneumonia shows a marked increase at this time of the year. Seventy-eight cases were reported during January.

Two cases of trachoma occurred in Los Angeles County.

There were 4 cases of poliomyelitis as against 8 for December. Two of these cases were in Humboldt County, 1 in Sonoma County, and 1 in Los Angeles.

There were 6 cases of epidemic cerebro-spinal meningitis. These occurred in San Francisco, Berkeley, Fresno, Mill Valley, and Porterville.

Smallpox.

Table Showing Distribution of Cases Reported during December, 1913.

Counties and cities	Number new cases reported during month	Number vaccinated within seven years preceding attack	Number last vaccinated more than seven years preceding attack	Number never successfully vaccinated	Vaccination history not obtained or uncertain
Alameda County -----					
Oakland -----	1			1	
Butte County -----	2	2			
Fresno County -----	1		1		
Coalinga -----	1				1
Imperial County -----	2		2		
Kern County -----	1	1			
Bakersfield -----	1			1	
Kings County -----	1			1	
Lemoore -----	4				4
Lake County -----	2				2
Lakeport -----	10			10	
Los Angeles County -----					
Los Angeles -----	11		2	9	
Monrovia -----	3			3	
Marin County -----	1				1
Nevada County -----					
Nevada City -----	2			1	1
Orange County -----					
Santa Ana -----	1				1
Placer County -----	1			1	
Auburn -----	1			1	
Sacramento County -----					
Sacramento -----	2			2	
San Bernardino County -----	1				1
Redlands -----	1				1
San Diego County -----					
National City -----	1				1
San Diego -----	2			2	
San Francisco -----	12		1	4	7
San Joaquin County -----					
Stockton -----	2			2	
Santa Clara County -----	14		1	1	12
San Jose -----	11				11
Santa Cruz County -----	4			1	3
Boulder Creek -----	2		1		1
Santa Cruz -----	16			11	5
Shasta County -----	1			1	
Sonoma County -----	1		1		
Sutter County -----	1				1
Tulare County -----					
Porterville -----	3			3	
Total -----	120	3	9	55	52

Typhoid Fever.*Distribution of Cases Reported during January, 1914.*

Counties and cities	Number of new cases reported during month	Counties and cities	Number of new cases reported during month
Alameda County -----		Merced County -----	2
Alameda -----	1	Merced -----	1
Oakland -----	3	Riverside County -----	
Berkeley -----	1	Corona -----	1
Piedmont -----	1	Sacramento County -----	2
Colusa County -----		Sacramento -----	79
Colusa -----	1	San Diego County -----	
Fresno County -----		San Diego -----	1
Sanger -----	1	San Bernardino County -----	
Imperial County -----	2	Ontario -----	1
Calexico -----	1	San Francisco County -----	33
Los Angeles County -----	3	Stanislaus County -----	1
Los Angeles -----	14	Tehama County -----	
Pasadena -----	5	Corning -----	1
Napa County -----			
Napa -----	1	Total -----	161

Poliomyelitis (Infantile Paralysis).

Counties and cities	Number of new cases reported during month
Humboldt County -----	
Eureka -----	1
Ferndale -----	1
Los Angeles County -----	
Los Angeles -----	1
Sonoma County -----	
Cloverdale -----	1
Total -----	4

Epidemic Cerebrospinal Meningitis.

Counties and cities	Number of new cases reported during month
Alameda County -----	
Berkeley -----	1
Fresno County -----	
Fresno -----	1
Marin County -----	
Mill Valley -----	1
San Francisco -----	2
Tulare County -----	
Porterville -----	1
Total -----	6

Number of Cases of Scarlet Fever, Measles, Diphtheria, Dysentery, and Other
Diseases Reported during January, 1914.

Disease	Number of new cases re- ported during month in the entire State
Scarlet fever -----	238
Measles -----	109
Diphtheria -----	202
Dysentery -----	
Amoebiasis -----	2
Chickenpox -----	293
Erysipelas -----	34
German measles -----	2
Gonococcus infection -----	23
Leprosy -----	2
Malaria -----	2
Mumps -----	91
Pneumonia -----	78
Syphilis -----	5
Tetanus -----	1
Trachoma -----	2
Tuberculosis -----	484
Whooping-cough -----	187